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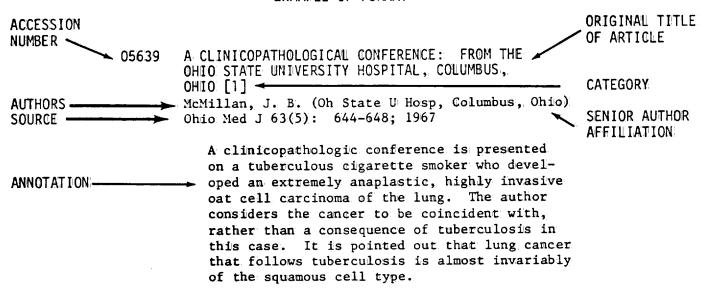
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EXAMPLE OF FORMAT



SECTION 1-CANCER

22782

THE NERVOUS SYSTEM, HORMONES, AND CANCER: STEROID EXCRETION PATTERNS AND PERSONALITY IN LUNG CANCER [1]

Kissen, D. M./Rao, L. G. S. (South Gen Hosp Psychosom Res Un, Glasgow, UK)

Ann NY Acad Sci 164 (Art. 2): [2], 476-482; 1969

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A biochemical study of 84 lung cancer and 112 noncancer patients (all males), aged 45-65, reports that lung cancer patients show a lowered adrenal response to the stress of hospital admission as measured by urinary 17-ketosteroids (17-KS) and 17-hydroxy-corticosteroids (17-OHCS), but an increased fluctuation in the amounts of steroids excreted from day to day as compared to the control patients. This increased variation in the lung cancer patients was found to be independent of age or smoking habits (no further details). These results are considered as suggestive evidence for the hypothesis that lung cancer patients have poor emotional outlets.

It is conceivable that androgens may be implicated in lung cancer and the findings of this study indicate that increased fluctuations in the levels of the 17-KS may also be of some significance in the etiology of lung cancer.

There is a significant positive correlation between extraversion and several steroid measures. There is some reason to believe that the 36 patients used for the psychological testing were not representative of the rest of the cancer patients in some psychological measures. Although extraversion is not found to be significantly greater in cancer patients in the present study it was found to be greater in breast cancer, and also in a small, earlier study in lung cancer. Therefore it can be said that low extraversion scores, unlike low neuroticism scores (negative association), are not a cancer characteristic, and the positive correlation between the extraversion scores and 17-OHCS variance

and total steroid variance, both of which are high among cancers, are meaningful. "We should not forget to point out that these abnormalities in steroid excretion in cancer patients may be the result of the disease and may not be related to the cause of the disease at all."

In the discussion following the presentation it is reported that over half of 25 lung cancer patients had a history of smoking during the course of the night because of sleeplessness, poor communication with people around them, and tension. It was noted that it was not always easy to get a clear smoking history from these people immediately; if one accepted their first version, this was sometimes found to be quite inaccurate. (Presented at the Second Conference on Psychophysiological Aspects of Cancer held by the New York Academy of Sciences on May 20-22, 1968.)

[Part of a Series: Document Nos. 22782-22783, 22785]

PSYCHODYNAMIC PROCESS AND CANCER: GENERAL AND ORGANIC-SPECIFIC OBJECT RELATIONSHIPS IN CANCER [2,4]

Booth, G.

Ann NY Acad Sci 164 (Art. 2): [2], 568-577; 1969

A psychological study of 93 cancer patients: (including 26 lung cancer patients) and 82 tuberculosis patients shows that cancer patients and tuberculosis patients are differentiable on the basis of their responses on the Rorschach test, and thus on the basis of the psychodynamics of the object relationships that they form in life. Tuberculosis-prone persons are characterized by the prevalence of the need for reaching out towards others for mutual relationships; they are symbiotic personalities dependent on sharing life with others, and they are flexible in pursuit of this (in psychoanalytic terms they are predominantly genital types). Cancer-prone individuals are characterized by the prevalence of the need for establishment of unilateral control over certain chosen objects; they strive for autonomy and depend on their power for maintaining the object relationships originally chosen, a trait which leads to rigidity and makes it difficult to replace lost objects (in psychoanalytical terms they are predominantly anal types). Depression is somatized in the form of neoplasia; the tumor represents a substitute for the lost external object, and the tumor is located in the organ involved psychophysiologically in the frustrated object relationship.

The perceptual tendencies of the cancer group were unrelated to the presence or absence of the disease: 13 records had been obtained 25 years before symptoms of cancer appeared, 46 patients were sick at the time of testing, and 35 had had successful operations. In the tuberculosis group the characteristic tendencies were obtained in 41 cases with poor prognosis and in 41 cases with favorable prognosis (including some who were cured).

It is postulated that the current cancer-prone population developed in the same 20% of the total population that died from tuberculosis in the middle of the last century; i.e., a new environmental factor (possible bottle-feeding of infants which

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prevents symbiotic interaction with the mother) effected this change of personality development in members of the same gene pool.

It is further postulated that persons prone to respiratory disease in general are strongly motivated for seeking satisfactory object relationships away from their native environment. Epidemiological studies have shown that tuberculosis and lung cancer are correlated with migration, urbanization, and socioeconomic deprivation; it is suggested that lung cancer is related to a frustration of a need for independent mobility. (Presented at the Second Conference on Psychophysiological Aspects of Cancer held by the New York Academy of Sciences on May 20-22, 1968.)

[Part of a Series: Document Nos. 22782-22783, 22785]

22883 LOSS OF ISOANTIGENS A, B, AND H IN CARCINOMA OF THE LUNG [2,4] Davidsohn, I./Ni, L. Y. (Chic Med Sch, III)
Amer J Path 57(2): 307-334; 1969

The mixed cell agglutination reaction (MCAR), used for the determination of isoantigens A, B, and H (identical to those found in erythrocytes), was found to be negative in over 90% of 104 biopsy and autopsy specimens of lung cancer and positive in specimens of hyperplastic and metaplastic bronchial epithelium. In fifty cases of metastatic lung cancer, the isoantigens could not be demonstrated in the primary carcinoma and in the distant metastases. The findings suggest that the loss of demonstrable isoantigens A, B, and H precedes the formation of distal metastases. In 2 cases metastases to peribronchial lymph nodes had demonstrable isoantigens.

It is pointed out that the generally accepted criterion of malignancy is anaplasia, the morphologic evidence of dedifferentiation. The loss of the A, B, and H isoantigens is interpreted as being the result of immunochemical dedifferentiation in the course of cancerous transformation. The change is analogous to morphologic dedifferentiation.

In case of carcinoma of the bronchus, the results of the MCAR may influence the diagnosis and prognosis. In cases in which the diagnosis of carcinoma in situ is being considered, and the opinions are divided, a negative reaction will favor the less auspicious interpretation. The probability of distant metastases is greater in the presence of a negative reaction and vice versa. "The potential clinical implications of these findings, if confirmed by sufficiently large and varied material, are obvious."

It is postulated that the decrease and loss of the isoantigens may be the result of a decrease of ability of epithelial cells to produce them, or to store them, if produced elsewhere, possibly changes in the cellular membranes, a change in their demonstrability by the MCAR, other as yet unknown factors, or of a combination of these.

The diagnoses of the 52 lung cancer cases subjected to autopsy included squamous cell carcinomas with varying degrees of anaplasia, oat cell carcinoma, and alveolar cell carcinoma in the primary lesions and in the metastases. The diagnoses of the biopsy specimens included 52 cases of lung cancer, 5 squamous cell metaplasia, 5 cases of chronic bronchitis, and 14 normal bronchial tissues. In a 46 year-old male with squamous cell carcinoma the squamous cell metaplasia did not influence the MCAR, indicating preservation of the tissue isoantigens. the same patient, the MCAR of the squamous cell carcinoma was negative; the positive MCAR was limited to a few streaks in the necrotic core in the metastatic mass. The isoantigen was absent in the oat cell carcinoma of a 63 year-old male. The same phenomenon of isoantigen loss was encountered in the adenocarcinoma of a 49 year-old female. The MCAR was positive in a total of 5 carcinomas.

22886

RELEVANCE OF ANIMAL TUMOURS TO MAN [2,9]

Anonymous

Lancet 2(7617): 418-419; 1969

No single species reacts to all carcinogens in a way similar to man; therefore, the interpretation of animal experimental results in reference to humans is never straightforward. In addition, the significance of certain animal tumors is disputed for example, local sarcomas in rats can be caused by subcutaneous injection of various substances including hypertonic glucose or salt solution and some food additives although different routes of administration result in no tumor induction. "The mouse pulmonary adenoma used to be regarded as of little relevance, although, with the realisation that it can be locally invasive, it is being restored to the reckoning."

"This uncertainty about the significance of some of the more commonly induced animal tumours complicates the task of those who have to judge whether a particular substance should be permitted in man's environment. At present, no firm rules can be pronounced and no substitute exists for informed opinion backed by common sense in weighing the experimental data against the advantageous properties of a potential carcinogen."

22945

THE CIGARETTE-LUNG CANCER IMBROGLIO AND PUBLIC OPINION [1,3,5,9] Kotin, P. (Nat I Env Health Sci, Research Triangle Park, NC)

JAMA 211(3): 506; 1970

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In reply to a letter about the conflicting evidence on the role of cigarette smoking in lung cancer the author states that in some cases professional attitudes are rationalizations while in others they are, "... based on admitted differences in data which reflect on our lack of total knowledge concerning the pathogenesis of cancer, but which in this instance do not negate the responsible conclusion that cigarette smoking is hazardous to health."

In addition to the overwhelming evidence of the relationship between digarette smoking and lung cancer, chemical carcinogens and pulmonary irritants have been identified and quantitatively determined in smoke, and tobacco tars have induced cancer in animal models. The risks for lung cancer, bronchitis, pulmonary emphysema, and cardiovascular disease increase with increases in the amount smoked and the smoking duration and decrease when smoking is discontinued. Far less stringent and consistent bodies of evidence have sufficed in the past to incriminate other environmental hazards such as aromatic amines, radiation, arsenic, and butter yellow.

PULMONARY TUBERCULOSIS AND CANCER [2,4]
Cliffton, E. E./Irani, B. B. (Sloan Kett I Canc Res, New York, NY)
New York J Med 70(2):: 274-278; 1970

A statistical study reviews the relationship of lung cancer to tuberculosis. From 1931-1965, 670 patients with diagnosed lung tuberculosis were seen at the Memorial Sloan-Kettering Cancer Center. Of these, 273 were proved to have cancer; 17 patients had 2 and 1 had 3 primary cancers. The most common sites of the 292 primary cancers were the respiratory system, oral cavity, digestive tract, and breast. The combination of cancer and tuberculosis was more common in the males than the females, 2:1; 80% of the patients with both tuberculosis and cancer are known to be dead. The relative incidence of the regional and organ sites of cancer seen at the Center differs from national statistics by revealing oral cancer to be 7-8 times higher in males at the Center than nationally.

Data indicated that the organs of the digestive and respiratory systems (tongue, oral cavity, pharynx, esophagus, stomach, larynx, and lung) through which tubercle bacilli might enter the body had a relatively increased incidence of cancer if tuberculosis were present. It is not clear whether this is a coincidence, the result of damage to the organs by the tubercle bacilli, or perhaps a relative susceptibility of these organs to both tuberculosis and cancer. It is also noted that patients with tuberculosis and cancer may have longer-survival rates than might be expected for the average patient with cancer of the same site. Further investigations are indicated.

RESEARCH ON THE CARCINOGENIC ACTION OF SODIUM CYCHAMATE IN THE MOUSE. (FRENCH) [2]
Rudali, G./Coezy, E., Muranyi-Kovacs, I. (Rad I, Curie Fdn, Paris, France)
Cr Acad Sci 269D(19): 1910-1912; 1969

Daily oral administration (in drinking water) of sodium cyclamate in doses approximating 10-15 times the ordinary human intake induced significantly more hepatomas and lung tumors in. XVII/G female mice and in hybrid male mice FI (C3H X RIII) than in controls. No significant differences were observed between treated and control C3H and RIII mice of both sexes. The tumors occurred late in the life of the animals (300-600 days). The animals presented multiple lung tumors resembling adenocarcinoma rather than adenoma. The results suggest that cyclamate has a relatively low but definite carcinogenic activity which is manifested mainly through the acceleration of the carcinogenic process. Thus 3 of 16 surviving control XVII/G mice developed tumors (all lung tumors) at the end of 568 days as compared to 20 of 20 treated animals (16 of 20 had lung tumors) that developed tumors at the end of 403 days of treatment. Sixteen of 28 surviving hybrid mice developed tumors (2 lung tumors) at the end of 479 days as compared to 29 of 34 (7 lung tumors) at the end of 330 days in treated animals.

Also see: 22778, p. 10 22851, p. 11 22952, p. 9 23004, p. 13

SECTION II-RESPIRATORY SYSTEM (NO CANCER)

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See: 22778, p. 10
22785, p. 2
22851, p. 11
22883, p. 3
22922, p. 8
22945, p. 4
22952, p. 9
22953, p. 15
22984, p. 5
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SECTION III-CARDIOVASCULAR SYSTEM

22777 DOES BUERGER'S EXIST? [5]

Van Dellen, T. R.

Illinois Med J 135(4): 404-405; 1969

An editorial suggests that the diagnosis of Buerger's disease is not a clinical entity and that the condition bearing his name is indistinguishable from premature atherosclerosis, embolism, or arterial thrombosis, as evidenced by autopsy and surgical specimens of cases with a preoperative diagnosis of thromboangiitis obliterans (TAO) and later findings of arteriosclerosis, rather than a histologic picture of inflammation.

The definition of TAO may also be in error. Buerger described a recurrent, progressive peripheral arterial insufficiency; this condition occurred most often in young Jewish males who were smokers. While tobacco is known to have a vasoconstrictive effect, the question remains why does not TAO also effect women and older men. The few women with Buerger's disease have been smokers, and some were mannish in appearance; the fact that females are spared suggests a causal relationship to hormones, which are known to play a role in atherosclerosis prior to the age of 50.

THE EFFECT OF ALTITUDE ON A PARAMETER OF CEREBRAL BLOOD FLOW IN SMOKERS AND NONSMOKERS. (FRENCH) [3,5]

Demange, J./Auzas, A. (Lab Aerospace Med Bretigny, France)

Rev Med Aero Spat 8(31): 125-127; 1969

A study of 10 subjects (5 heavy digarette smokers and 5 non-smokers), aged 20-30 years, in a decompression chamber which simulated altitudes of 1000-5000 meters above sea level showed

that cerebral blood flow increased 30-40% at 5000 meters. This increase in blood flow is caused by vasodilation produced by hypoxia.

Cerebral vasodilation occurred at altitudes of 2000-3000 meters in nonsmokers and at 1000 meters in smokers; the extent of vasodilation was significantly greater in smokers. One of the smokers who became rather excited developed marked polypnea and signs of vasoconstriction at an altitude around 3000 meters; no changes in respiration were noted in any of the other subjects. These findings, "... illustrate the old adage that a smoker lives permanently at an altitude of 1000-1500 meters because of his high carboxyhemoglobin levels and perhaps because of a change in the diffusion capacity of the alweolar membrane."

22952

CARDIOVASCULAR DEATH RATE HELD: DECREASED 20% SINCE 1950 [2,4,6,8]

Med Trib 11(4): 3; 1970

A news report discloses that according to statistics released by the American Heart Association, the cardiovascular disease mortality rate among Americans under 65 years of age has declined 20% since 1950. Myocardial infarction mortality has declined only 2% in this age group, but the death rate due to hypertension and hypertensive heart disease has dropped 63%, that due to stroke, 35%; and that due to other cardiovascular disease, 27%. Comparing the present day cardiovascular disease death rate with that which would have occurred if 1950 mortality had persisted, the report estimated that about 51,000 persons are alive today as a result of improved methods of diagnosis, treatment, prevention, and rehabilitation.

For all ages combined, cardiovascular diseases are actually responsible for 54% of total mortality. During the last year for which reliable figures are available, cardiovascular deaths in the U.S. totaled 1,002,111 (including 250,977 younger than 65 years old) as against 310,983 for cancer; 113,169 for accidents; 56,892 for pneumonia-influenza; and 35,049 for diabetes. More than 27 million Americans are actually living with some form of cardiovascular disease, including 12.67 millions with hypertensive heart disease, 3.65 millions with coronary artery disease, 1.51 millions with rheumatic heart disease, and 8.37 millions with hypertension without heart disease.

Also see: 22778, p. 10

22851, p. 11

22945, p. 4

22984, p. 5

SECTION IV-MISCELLANEOUS

THE INTELLECTUAL MORBIDITY OF VITAL STATISTICS [1,3,5,7] Feinstein, A. R. (Yale U Sch Med, New Haven, Conn)

Med Count 1(8): 34-40; 1969

"Statistical data on changes in the annual incidence rates of disease are beset with many errors, some so great as to make the statistics not only useless but badly misleading," and epidemiologists speculating about the role of genetics or exogenous factors (diet, urban air pollution, cigarette smoking, radiation exposure) should be cognizant of this. Factors contributing to errors in vital statistics and to comparisons of past and present statistical information are changes in disease definitions and procedures for medical history and physical examination with improved technology, changes in the reasons that make patients seek medical attention (thereby altering the population about which medical information is known), errors and ambiguities introduced by physicians and coders in preparation of death certificates, changes in disease classification procedures, and the small percentage of autopsies performed in connection with certification of deaths (20% of all deaths in the U.S.).

"There are no specific diagnostic criteria for identifying during life such ailments as coronary artery disease, pulmonary emphysema, diabetes mellitus, cancer (in the absence of microscopic evidence), and cerebral arteriosclerosis. The occurrence of these diseases will accordingly fluctuate with their diagnostic popularity"

It is impossible today to get a valid appraisal of disease rates in the past. The marked increase in emphysema and bronchitis in the U.S. since 1949 may be due to changes in priorities for classification of death causes. The decrease in lung cancer between

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1947 and 1949 is an example of this type of statistical artifact; however, the increase in lung cancer in this century may be a statistical illusion due to increased diagnosis.

Epidemiologists must consider temporal and geographic variations that can occur in diagnosis and variations that occur according to whether or not the examining physician employs sophisticated laboratory diagnostic techniques. (Thus, a single condition could be diagnosed as chronic bronchitis, lung emphysema, lung tuberculosis, or lung cancer by four competent clinicians using different concepts of nosology, technology, and interpretive criteria.)

22851 CIGARETTE FILTRATION - A DILEMMA: MODIFICATION OF CIGARETTE FILTERS RAISES QUESTIONS CONCERNED WITH REPORTED HEALTH HAZARDS OF CIGARETTE SMOKE AND THE PSYCHOLOGICAL MAKEUP OF THE SMOKER [1,3,5,7] Wakeham, H. R. R. (Phil Morr Res Cent, Richmond, Va) Ind. Eng. Chem. 61(9-Repr): 10-13; 1969

A review of the modification of cigarette filters states that undoubtedly many people prefer filters because they keep tobacco particles out of the mouth and generally deliver a milder taste, but many others also hope and/or believe that somehow filter cigarettes are less hazardous to health. Presumably the object of research is to find a way to relieve the statistical association between smoking and health since selective filtration assumes the presence in smoke of specific ingredients which act as causative agents of those diseases associated with cigarette smoking.

Cigarettes are enjoyed by many people, providing them with pleasure, release from tension, mental stimulation, and social relaxation. Therefore, it is no surprise that, "the problem of the cigarette filter presents a dilemma far beyond the mere choice of a fiber or an activated charcoal"; however, "... I do not know that any cigarettes are hazardous to health."

The cigarette causation hypothesis is not adequate to explain the statistical association. Human-type lung cancer has never been produced in the lungs of experimental animals by inhalation of cigarette smoke, even though it has been produced experimentally by inhalation of other suspected agents. The production of cancers by painting artificially prepared smoke condensates on mouse skins does not parallel the exposure of man to smoke. The quantities of suspected chemicals in smoke are too low to account for the incidence of disease expected from statistical data on the association of smoking to disease in man. Ten to 20% of lung cancer in man occurs in nonsmokers and is indistinguishable from similar lung cancers in smokers. Cancers of the oral cavity (the mouth, the larynx, and the trachea) have not increased in proportion to cancer of the lung as one would expect from the exposure to smoke sustained in these areas. Suspected ingredients in cigarette smoke are present in much greater quantity in pipe smoke, but pipe smokers who inhale have disease rates similar to those of nonsmokers. Studies of heart disease

have this.

and mortality rates in identical twins show no difference between the smoking twin and the nonsmoking twin. The cigarette causation hypothesis fails to account for these observations, as well as other observations which will be cited later.

"When a hypothesis cannot be reconciled with the facts, then science demands that a better explanation be sought. There is an alternative to the digarette causation hypothesis, ... which says that when people are grouped as smokers and nonsmokers, there is a greater concentration of susceptible, or high-risk people among the smokers ...; the susceptible, high-risk people find digarette smoking gratifying and are therefore present in greater numbers among digarette smokers than among nonsmokers." There is a growing body of observations which supports the "susceptible person" hypothesis.

It has been proposed that certain people who experience high levels of tension and anxiety and people subject to more distressing inner emotions are more likely than others to find cigarette smoking gratifying. A research team in England concluded a study of approximately 2500 people with this statement: "'We have found that the most persistent precondition for smoking is a high degree of experience of emotion which is seen as disturbing by the individual. "The Midtown Manhattan Study reported that people who smoke are characterized by ""a high level. of tension and anxiety, " resulting in "'a special adult susceptibility to overdependence on tobacco.'" An extensive study of 10 classes of medical students concluded that heart rate and anxiety level were the two factors that most clearly distinguished the smokers from the nonsmokers, with heavy smokers exhibiting the fastest heart rate and admitting to the most anxiety. A number of psychological studies report a greater incidence of smoking among people showing the higher degrees of psychological maladjustment and among psychiatric, rather than among nonpsychiatric, patients. Also, heavy smokers of another study presented a higher number of somatic and psychological complaints.

It has been proposed that some personality types find smoking more gratifying than do other personality types. Smokers consistently test out as more extroverted, more gregarious, more impulsive, more "acting-out" in behavior than nonsmokers, and extroversion increases progressively from the nonsmoker to the light, to the medium, and finally to the heavy smoker. An increasing percentage of people whose behavior was characterized by enhanced competitiveness, drive, aggressiveness, and hostility, and an excessive sense of time urgency was found among smokers contrasted with nonsmokers.

It has been proposed that a self-indulgent, excitement-oriented, restless style of life is more characteristic of the smoker than the nonsmoker. There are more beer, whiskey, and heavy coffee drinkers among smokers than among nonsmokers. The incidence of smoking is much higher in the business world than in the non-business world; and cigarette smoking is more frequent among divorcees, job changers, residence changers, and nonchurchgoers.

Death from accident, suicide, and violence is higher among smokers than among nonsmokers. The incidence of smoking is greater among those drivers with records of accidents than among those with records of no accidents; injury is higher among smokers than nonsmokers, with the rate increasing with increased smoking rates.

It has been proposed that there is a higher incidence of cigarette smoking among those with the more stressful and turbulent histories in formative years. Heavy smokers among high school seniors had poorer family relationships than nonsmokers. Adult smokers report greater dissension with parents during adolescence than nonsmokers.

SURVEYS: FIND SMOKERS LOSE HEARING AT HIGHER RATE THAN NON-22997 SMOKERS [7.9]

Anonymous

US Med 5(24): 15; 1969

A news report discloses that auditory surveys of business executives showed a significantly higher prevalence of hearing loss in heavy cigarette smokers than in nonsmokers and light smokers. The study was performed in 97 males, aged 50-67 years at various pure tone frequencies. Nonsmokers had a prevalence of hearing loss ranging from 18 to 20% at the three lowest frequencies, while cigarette smokers had a prevalence of 38% at the lowest frequency and 35% at the second lowest frequency. When the smokers were divided by smoking amount (48 smoked 20 or more cigarettes per day and 17 smoked less than this amount), the prevalence of hearing loss at the two lowest frequencies was more striking among the heavy smokers. Statements were made to the effect that audiogram testing for hearing loss does not give definite indications whether the loss is conductive or sensineural, although hearing loss in the lower frequencies suggests that it is conductive. (See also Document No. 22395.)

23004 SUBJECTS [1,7] Smith, G. M. (Harv Med Sch, Mass Gen Hosp, Boston, Mass) J Consult Clin Psychol 33(6): 710-715; 1969

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A study of 562 high school and junior high school students (including at least 294 females and 263 males) yielded results which cross-validate and extend the generality of earlier work with 1,462 adults. In both studies, smoking status was assigned on the basis of self-report information, and personality scores were derived incomparation the preadults, as with the adults, smokers scored signifiand personality scores were derived from peer ratings. With cantly (p<.001) lower on measures of "Agreeableness," and "Strength of Character," and scored significantly higher on measures of "Extraversion." In addition, the smokers (in both studies) scored significantly higher than the nonsmokers on the variables "crude," "happy-go-lucky," and "frank."

Among preadults, multiple discriminant analyses permitted smoking status to be assigned with accuracy ranging from 65% to 79%.

Although most information concerning the psychodynamics of smoking has been obtained from studies of adults, the present study supports the use of such information in developing antismoking educational campaigns aimed at preadults. Students who reported that they currently smoke seven or more cigarettes: per week were classified as smokers; those reporting less frequent smoking (or none) were classified as nonsmokers. With this definition 27% of the high school students and 16% of the junior high school students were classified as smokers. Because frequency of smoking among the latter was low by this definition, the nonsmokers were further divided into those who reported that they had smoked 20 or more cigarettes in their life-time and those who reported that they had not. On the basis of this definition 38% of the junior high school students were classified as smokers. A better discrimination of smokers-nonsmokers was obtained by means of this second definition.

The question of whether, and how, smokers differ from nonsmokers regarding personality is of psychological interest for two reasons. First, the association between smoking and disease, although accepted, is not uniformly interpreted. Thus, some investigators suggest that genotypic factors (constitution, temperament) might predispose some persons to become smokers and also predispose them to develop lung cancer. Whether or not this theory has merit, the differential morbidity rates of smokers and nonsmokers will probably become more understandable as constitutional and psychosocial differences between these two groups are further specified. Second, little is known about the motivational factors underlying smoking behavior. This knowledge is important because the effectiveness of antismoking education will improve with the accumulation of information concerning the psychodynamics of smoking.

Also see: 22952, p. 9 22953, p. 15

SECTION V-MEDICAL OPINION

D.C. GROUP JOINS FIGHT ON SMOKING OF AIR PASSENGERS [3,7,9]
Anonymous
Med Trib 11(4): 4: 1970

A news report discloses that the Medical Society of the District of Columbia has joined the campaign to require airlines to establish nonsmoking areas in planes so that nonsmokers may be guaranteed the right to breathe unpolluted air, and a bill has been introduced into the U.S. Senate to this end. "The rights of the nonsmokers to fly free from the danger and irritating effects of smoke must be protected." A petition has been filed with the Federal Aviation Administration which declares that cigarette smoke constitutes a health hazard to all nonsmokers.

It has been demonstrated that nonsmokers in confined situations suffer eye irritation, nasal symptoms, headache, cough, wheezing, sore throat, nausea, hoarseness, and dizziness; and the percentage affected increases greatly for those with various particular susceptibilities including chronic bronchitis, emphysema, chronic sinusitis, asthma, hay fever, and other disorders. Other studies have shown that children are adversely affected by cigarette smoke in a confined area. In addition, there is some indication that cigarette tar build-up on the exhaust flow ducts in aircraft may be a potential safety hazard, and limiting smoking to certain areas would enable the airlines to clean more easily those ducts in the smoking area.

Also see: 22886, p. 4 22945, p. 5 22997, p. 13

